

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Note: Instructions to DNRC staff for preparing this EA can be found at:
http://www.dnrc.state.mt.us/eis_ea.html

Part I. Proposed Action Description

1. *Applicant/Contact name and address:*

Daniel A. Kurz
8723 Overlook Lane
Bozeman, MT 59715

2. *Type of action:* Application for Beneficial Water Use Permit #30024449-41H

3. *Water source name:* groundwater

4. *Location affected by project:* SWNWSW, SEC. 20, T15S, R5E, LOT 37 OF
GRANDVIEW HEIGHTS SUBDIVISION No. 2, GALLATIN, Co.

5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:* THE APPLICANT IS PREPARING TO DRILL A SECOND WELL DUE TO A FAILING PRIMARY WELL. THIS WELL IS LOCATED WITHIN THE SYPE'S CANYON CONTROLLED GROUNDWATER AREA. A TOTAL OF 12 GPM, UP TO 1.63 ACRE-FEET WILL BE COMBINED BETWEEN TWO WELLS. THE DNRC SHALL ISSUE A PERMIT IF THE APPLICANT PROVES THAT THE CRITERIA, 85-2-311, MCA, ARE MET.

6. *Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)*

Montana State Historic Preservation Office, Montana Department of Fish, Wildlife & Parks, Montana Natural Heritage program, Montana Department of Environmental Quality, Gallatin County Planning Office, Gallatin Local, Water Quality District.

Part II. Environmental Review

1. Environmental Impact Checklist:

<h2>PHYSICAL ENVIRONMENT</h2>

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - *Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

Determination: The source of water is a well, which is not listed as chronically or periodically dewatered by the DFWP.

Water quality - *Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

Determination: This well is not listed on the DEQ,303(d) list.

Groundwater - *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: This well is located in the Sypes Canyon Controlled Groundwater Area. This area has been experiencing problems with groundwater supply, with many wells going dry. It appears that groundwater levels are declining. Groundwater quality should not be impacted by additional withdrawal from the aquifer. The fact that this is a controlled groundwater area indicates that the water supply is already having problems. Any additional withdrawal may only compound the existing problem.

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

Determination: Water will be pumped from the well using a 1.5 HP pump. This well will have no channel impact, or impact on riparian areas or create any barriers.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife.*

For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or “species of special concern.”

Determination: The Montana Natural Heritage Program was contacted. They found no record of species of special concern.

Wetlands - *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: It is conceivable that wetlands may exist along riparian corridors. It is unknown if they would be impacted by development.

Ponds - *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: This project does not involve a pond.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

Determination: Soil quality may be enhanced with the addition of additives such as topsoil, and fertilizer to domestic lawns & gardens. Moisture content will be increased as lawns are irrigated. Soil stability should be unchanged. There is no evidence of saline seep.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Determination: Existing vegetative cover will be altered during construction of the well, dry land pasture grass will be replaced with a well. Noxious weeds may spread if the applicant does not control them.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: No known effects to air quality.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.*

Determination: SHPO was contacted. Three historic sites were identified (A log structure, Hotel, and a School) during a previous search. They recommend that a cultural resource inventory be conducted in order to determine whether or not sites exist and if they will be impacted. Since the development is to occur on private property, an inventory is not required. It is unlikely that individual lot owners will conduct such a search.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: This project will add a second diversion to the existing water right. Additional power may be required to run both wells.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: This home is located in a subdivision which has been approved by Gallatin County.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: This project is located on private land, with no access to recreational or wilderness activities. No impact is expected.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: No impact on human health is expected.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*

Yes___ No_x__ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: Private property rights are not impacted by this proposed action.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

- (a) Cultural uniqueness and diversity? No impacts identified.
- (b) Local and state tax base and tax revenues? No impacts identified.
- (c) Existing land uses? No impacts identified.
- (d) Quantity and distribution of employment? No impacts identified.
- (e) Distribution and density of population and housing? No impacts identified.
- (f) Demands for government services? No impacts identified.
- (g) Industrial and commercial activity? No impacts identified.
- (h) Utilities? No Impacts identified.
- (i) Transportation? No Impacts identified.
- (j) Safety? No impacts identified.
- (k) Other appropriate social and economic circumstances? No impacts identified.

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts and Cumulative Impacts

It is unknown at this time if the removal of water from the aquifers beneath the Sypes Canyon Controlled Groundwater Area will have additional impacts on the already questionable water supply. The human population will be impacted if they have to deepen their wells.

3. *Describe any mitigation/stipulation measures:* The applicant must agree to install a department approved measuring device at a point approved by the department. The appropriator shall keep yearly records of the volume of all water diverted. Upon notice from the department that a complaint has been received from a senior water right holder regarding adverse affect to their right, the appropriator shall modify their use, as

instructed by the department, until an investigation has been completed. This may come as a requirement to cease all irrigation

4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider: The City of Bozeman may be able to extend their water supply line to this area. A well could be drilled outside the Controlled area, and water could be pumped to a storage tank, which could supply all new growth within the Sydes Canyon Controlled Groundwater Area. These alternatives may be cost prohibitive.

PART III. Conclusion

1. Preferred Alternative: No preferred alternative at this time

2. Comments and Responses: None received at this time.

3. Finding:

Yes___ No x Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: An EA is adequate for this project.

Name of person(s) responsible for preparation of EA:

Name: Porter Dassenko

Title: Water Resource Specialist

Date: 10/23/2006